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Helping Third-Grade Students with Task Management in a Montessori Classroom

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Abstract

In this study, ten third-grade students in a Montessori classroom were observed and encouraged to discover strategies to help them manage their coursework. The teacher facilitated individual conferences with each student that focused on developing specific independent work time strategies. The students also had the opportunity to assemble a portfolio and to reflect on their progress. In addition, quantitative data was collected that focused on student engagement and work completion. The study revealed that students were drawn to larger projects, particularly in history and geography. They were also drawn to work that would need little to no guidance to complete. Based on these findings, to engage students in various subject areas there should be opportunities for one-on-one feedback and for large, culminating projects as long as all necessary resources for completion are easily accessible to students.

We are not born with a passion to promptly check items off of a to-do list. Our first experience with a to-do list goes back to the basics: what do I need to survive? In other words, if I don't hunt or gather food, I will be in danger and may starve. Over time, in addition to survival, the sense of urgency to complete jobs, chores, seemingly meaningless tasks, or whatever you decide to call it only comes with training. With that being said, it's not likely that you would see a six-year-old walk into a classroom with all of the organizational strategies they need to be in school. Think about all of the tasks one first grader needs to complete in one day. The child enters the school, hangs up her belongings, walks calmly into the classroom, checks in with the teacher about the agenda, goes to a lesson, knows how to sit at a lesson, gathers what she need for lunch, knows the bathroom pass procedure, knows how to clean up, keeps up with her assignments, and so on and so forth. Imagine the amount of training needed to navigate such a day for a child that has never experienced this kind of routine before. The following study explored the tools and strategies necessary to assist students with task management.

Students from preschool to college hear the same message: stay focused and stay on top of things. Can you remember the first person that inspired you to value a job well done? If you can remember back to that special someone, can you remember how they were effective in teaching you how to accomplish a task? Learning the value of completing a task and completing the task properly does not come without explicit training and experience. Furthermore, without being explicitly taught the strategies necessary to complete a task, even the most menial of tasks could be a challenge for a student to accomplish.

When "…students don't necessarily understand the purpose of the task, [this] can lead to the selection of a less adequate, or even inadequate, approach by the student" (Malmberg, Järvelä, & Kirschner, 2012, p. 114). Therefore, when students lack strategies and skills to complete a task, specific strategies and tools must be explicitly taught. According to Reeve and Jang (2006) in their article, *What Teachers say and do to Support Students' Autonomy During a Learning Activity*, at the source of task management, there are two factors or, better yet, questions at play:

1. Do I contain the skills or structure to complete this task?
2. Do I believe in the benefits of completing this task?

Question one refers to the structure or the systematic strategies used to perform a task. Question two refers to the motivation behind the actual purpose of the task. Question two also implicitly values the autonomy of the child. According to Jang, Reeve, and Deci (2010), classrooms that have provided high structure and high autonomy support have resulted in higher student engagement. Therefore, teachers that have discovered ways to help students manage the multitude of tasks they are expected to complete each day in school have implemented a system that is highly structured and is highly engaging.

This action research project explored and implemented structural and motivational strategies in a lower elementary Montessori classroom. The community was multi-aged, composed of first through third-graders. This study, however, specifically focused on the 10 third graders in this classroom, which consisted of four girls and six boys. The curriculum was supplemented with beautiful, hands-on materials that the students were encouraged to manipulate and use to aid their understanding. Lessons were

given in smaller groups or by grade level, so that each child could have a chance to ask questions and handle the material for each subject. While students were not in their small group lesson, they were expected to attend to the assignments from their lessons. It has been observed that it was during this time when students were expected to work independently that the students' task management skills suffered the most. Even though the students were captivated during lessons, there still remained a disconnect between their engagement during lessons and their capacity to complete their assignments independently. Something was missing from their skillset and it was hindering them from staying on task and on top of their assignments. Once children leave lower elementary and move on to upper elementary in this Montessori school, their task management skills will need to be much stronger in order to keep up with the more advanced and rigorous content. Since this group of third-graders would be moving up to upper elementary the following year, that became the specific reason why these ten students became the focus group for this research.

One of the strongest beliefs behind the Montessori philosophy is to inspire life-long learners, and the teachers in this classroom strived to foster that love of learning. With that being said, the goal of this study was to employ strategies and tools to help this small group of students not only love to work but to learn the practical skills necessary to complete the work. Both structure and motivation were kept in mind when the methodology behind this action research project was crafted. According to the literature, teachers that employed the following strategies in their classrooms saw stronger task management skills and higher student engagement:

1. A structure with clear expectations was in place (Jang, Reeve, & Deci, 2010; Skinner & Belmont, 1993; Tucker et al., 2002).
2. An organized classroom where necessary resources were easily accessible (Cadima, Doumen, Verschueren, & Buyse, 2015; Montessori, 1984; Rathunde & Csikszentilhalyi, 2005).
3. Provision for differentiation and scaffolding in the work so that each student could do the work (Jang, et al., 2010; Kronenberg & Strahan, 2010; Van Bocker, Wenger, & Ashworth, 2004).
4. The existence of supportive relationships and guidance between the students and the teachers (Kronenberg & Strahan, 2010).
5. The presence of freedom of choice integrated with an equal balance of responsibility (Duffy, 2012; Rathunde & Csikszentimihalyi, 2006; Reeve & Jang, 2006).
6. The opportunity for students to reflect and receive constructive feedback on their strengths and challenges, and then urged to set goals (Gay, 2011; Hackmann, 1996; Rathunde & Csikszentimihalyi, 2006; Strahan, 2008).

The following study will focus on a collection of strategies a teacher can use to help her elementary students stay on task during their school day. Each category will be explored further in the review of the literature, but specifically the third, fourth, fifth, and sixth strategies from above helped guide the direction of this study.

The first data-collecting tool for this study was to observe the third graders and take notes on which kinds of works they were or were not engaged in during their independent work time. The second was to have individual work conferences with each

student. It was during these conferences that we discussed struggles, successes, interests, and set reasonable goals. Third, the students were guided to build and reflect on the assignments they assembled into a portfolio. Finally, data was collected that included which works were completed, incomplete, late and also whether a student has been absent or refused to attend a lesson. Essentially, the goal of this data collection was to see whether or not the tools would successfully assist the students with their task management and their work completion.

Literature Review

In elementary classrooms, work completion entails more than just submitting an assignment. The teacher has the responsibility to observe and reflect on this question: are the students engaged? If they are not engaged, the teacher cannot reasonably expect high-quality work to be completed. Issues with students avoiding their work are not new issues. When considering work completion, two common themes arise in the literature: structure and autonomy support. Rather than implementing punitive measures, or worse, blaming the student for not completing the work, the implementation of structure and student autonomy support have helped educators get at the heart of motivating students to complete their work (Jang, et al., 2010). According to the literature, the following characteristics were demonstrated in classrooms that had high structure and high autonomy-support:

- Organization
- Differentiation and scaffolding
- Relationships
- Freedom and responsibility

- Student-led work conferences

Setting clear expectations and providing a prepared environment fall under structure. Encouraging students to take ownership over their education falls under supporting student autonomy. Providing differentiation in assignments, building meaningful relationships, allowing the students to have freedom of choice, and student-led conferences fall under a combination of both structure and autonomy support. This review will explore each category of structure and autonomy support and address how they interplay in lower elementary classrooms. Evidence will be presented from a variety of elementary classrooms, but with a focus on Montessori classrooms.

Structure

Clear expectations.

Psychologists and educators alike make strong cases for the importance of implementing structure and communicating clear expectations (Jang, et al., 2010; Skinner & Belmont, 1993; Tucker et al., 2002). To further define the components of structure, Jang, et al. (2010) discovered three categories. Structured teachers (a) present clear, understandable, explicit, and detailed directions; (b) offer a program of action to guide students' ongoing activity; and (c) offer constructive feedback on how students can gain control over valued outcomes (Jang, Reeve, & Deci, 2010, p. 590). These categories have been supported by multiple studies written by Brophy (1986); Skinner (1995); Skinner & Belmont (1993) and Skinner et al. (1998).

When teachers have provided little guidance, unclear instructions, or a laissez-faire demeanor, Jang, et al. (2010); Brophy (2006); Skinner & Belmont (1993); and Tucker et al. (2002) all argued that chaos was the result. Dr. Maria Montessori also

recognized that there is a need for discipline and structure. Dr. Montessori stated that, "You must not imagine that liberty is something without rule of law" (as cited in Standing, 1984, p.286). Structure, in other words, is paramount to student engagement. On the other hand, highly structured teaching styles can also be easily confused with controlling instructional styles. Teachers that are structured do not necessarily employ rigid demands, insistences, or arbitrary rules (Jang, et al., 2010). In fact, Jang, et al. (2010) argues that when control is used to provide structure, it is detrimental to student engagement. As Dr. Montessori (2007) stated in her book *To Educate to the Human Potential*, "Our aim therefore is not merely to make the child understand, and still less to force him to memorize, but so to touch his imagination as to enthuse him to his inmost core" (p. 11).

Organization.

The second element of structure is an organized classroom environment. Organization is essentially synonymous with structure, but in this case the focus falls on the physical environment of the classroom. According to Cadima et al. (2015); Downer et al. (2010); and Pianta, La Para, & Hamre (2008), organized classrooms with accessible materials and resources have supported a child's active engagement in classroom activities. In classrooms that have employed experiential learning, such as Montessori classrooms, the prepared environment has been key to enhancing student concentration and, therefore, work completion (Rathunde & Csikszentilhalyi, 2005, p. 347). As stated in the introduction, ideally every thing in the classroom has a function and an intended purpose in a prepared environment. For example, shelves and furniture might be lower for easier access. Displays and materials might appear attractive and orderly so the

students will want to use the materials from a lesson and use the materials respectfully. A prepared environment may also have the resources that students need to complete their assignments, i.e. books, paper, pencils, readily accessible. Dr. Montessori (1984) stated that, "Only 'normalized' children, aided by their environment, show in their subsequent development those wonderful powers that we describe: spontaneous discipline, [and] continuous and happy work…" (p. 206). When the classroom environment has been prepared, students have been able to easily navigate the room to find necessary materials and to complete an assignment with little to no guidance from the teacher. It has been shown that organized classrooms have helped minimize transition time and have helped maximize on-task behavior (Cadima et al., 2015, p. 3). When less time has been spent scrounging for materials and finding work to do, more time has been freed to encourage independence and to engage in completing projects.

Autonomy Support

"The reason students benefit from their exposure to teachers with a structured instructional style is because such a style supports students' perceptions of competence, perceived control over valued outcomes, and self-regulated learning strategies" (Jang, Reeve, & Deci, 2010, p. 590).

Freedom and responsibility.

High structure has allowed teachers to support the students' autonomy. In an article titled "What Teachers say and do to Support Students' Autonomy During a Learning Activity," the authors measured what teachers actually said and did while they delivered lessons (Reeve & Jang, 2006). The researchers hypothesized that if the teacher had an autonomy-supportive teaching style, the teacher: (a) spent time listening rather

than monopolizing the conversation; (b) provided rationales for the assignment; (c) allowed the student to complete the work in their own way; (d) encouraged inquiry and were responsive to student-generated questions (Reeve & Jang, 2006, p. 211). Teachers that gave students the freedom and responsibility to ask questions and to find understanding in their own way were autonomy-supportive teachers.

There are many schools with varying philosophies that support the students' autonomy, but in Montessori schools autonomy-support education, or auto-education, has remained a vital element of an authentic Montessori classroom (Duffy, 2012). In the book, *Love of Learning: Supporting Intrinsic Motivation in Montessori students*, Duffy (2012) elaborated further on the importance of auto-education in the Montessori classroom,

> For Montessori, the essential element in student motivation is the experience of becoming autonomous learners who are free to develop themselves into the persons they choose to become…Education is not a passive experience of memorizing what a teacher or textbook tells us. It is an active experience of taking charge of one's own intellectual and psychic development… (p. 25)

A number of researchers and educators have found that when students have taken ownership of their learning through auto-education, increased student engagement and work completion is present (Duffy, 2012; Rathunde & Csikszentimihalyi, 2006; Reeve & Jang, 2006).

Structure and Autonomy Support

When looking at classrooms that have implemented strategies that integrate a combination of structure and autonomy support, student engagement has been given the opportunity to thrive (Jang et al., 2010).

Differentiation and scaffolding.

When teachers have come to lessons, expecting equal competency in all subjects, then there has been less of a likelihood that all of the students will be engaged in the lesson (Van Bockern, Wenger, & Ashworth, 2004). When the teacher has not provided the scaffolding for all students to comprehend the lesson, the result has lead to discouragement and diminished student autonomy (Van Bockern et al., 2004). Moreover, differentiation has shown that when teachers have given students the opportunity to share their knowledge in their own way, student engagement has intensified (Kronenberg & Strahan, 2010). Responsive teaching is what Kronenberg & Strahan (2010) have defined as a teaching style that has provided constant support, authentic feedback, and instruction that has valued academic and personal choices. "Differentiated instruction is responsive instruction" (Kronenberg & Strahan, 2010, p. 78). The definition of responsive instruction considers the needs and differences of each child with the goal resulting in more student engagement. The structure has been embedded to provide differentiation, and the scaffolding has supported the autonomy of the student.

Relationships.

The building of trustworthy relationships between teachers and students is another significant strategy that has incorporated structure and autonomy support (Duffy, 2012; Jang et al., 2010; Kronenberg & Strahan, 2010). Classrooms that have nurtured

communities and that have valued the individuality of each child have resulted in higher levels of engagement and reasoning (Kronenberg & Strahan, 2010, p. 79). Cadima et al. (2015) have also argued that high trust and low conflict has resulted in the most optimal learning environment. A flow chart from Strahan's (2008) study allows the reader to follow the steps of academic momentum. Note how the following progression for academic momentum links to relationships:

(1) The teacher must create a classroom community that nurtures trusting relationships.

(2) Once the threshold of creating connections has been crossed, the teacher engages and scaffolds student learning during activities.

(3) Then, the teacher and the student work together to set goals and plan to assume more responsibility for their learning.

(4) As the student experiments with new behaviors, thoughts, and feelings, the student along with the teacher's guidance, can make choices about the way in which the student can learn best.

(5) Finally, with continued feedback and social support, this leads to the student growing stronger academically. (p. 79)

To summarize, studies have shown that building relationships are crucial to motivating students to engage in their work (Cadima, et al., 2015; Duffy, 2012; Jang, et al., 2010; Kronenberg & Strahan, 2010; Strahan, 2008).

Student-led work conferences.

According to Gay (2011), "Student-led conferences provide a venue for students to cultivate self-knowledge" (p. 24). Student work conferences have become a tool to

build trusting relationships with the students. Classrooms that have implemented student-led work conferences have given students the opportunity to receive social support and feedback. This social support and feedback have proven to be essential according to the study of academic momentum stated in the previous topic (Strahan, 2008). When students are given the chance to reflect and are urged to set goals for themselves, they have a bar to strive for (Gay, 2011; Ranthunde & Csikszentmihalyi, 2005). In another study, Hackmann (1996) has shown that student-led conferences have encouraged students to be "active learners, rather than passive recipients of information." In the same study, the researcher found that when students practice self-evaluation, they are more likely to produce quality work (Hackmann, 1996)

Conclusion

Based on the literature, the classrooms that implemented a balance of structure and autonomy support have demonstrated higher work completion. Teachers have maintained classroom structure by providing clear expectations and a prepared environment. Furthermore, teachers have supported student autonomy through differentiating instruction, scaffolding lessons, and by encouraging students to ask questions, reflect, and discover their interests. Essentially, when the work is purposeful, and the identity or will of the student is valued, then student engagement is the result.

Methodology

Throughout the study, there were four tools used over the course of six weeks to collect and gather data about the students' progress related to their task-management skills. The tools included record keeping of assignments completed, observational data, weekly work conferences with each student, and work portfolios.

Before interventions began with the students, baseline data was gathered, specifically: how many works up to date were complete, incomplete, or late. Also, instances where students who were absent or refused to come to lessons were also documented (Appendix A). In addition to this quantitative data, photos were taken of the students' work before the study for their portfolio. Having samples of student work before the study gave the students the opportunity to compare and see if they had made any progress in the quality and timeliness of their work over the course of the study. The first work selections in each student's portfolio included a language sample and a math sample (Appendix B). After all of the baseline data was gathered, the students started attending weekly conferences. In addition, observational data was gathered and also records of complete, incomplete, or late works were documented each week.

The first week of the study was dedicated to collecting the baseline data on the students' work completion. Shortly after the baseline data was collected, the teacher gathered the ten third-grade students for a whole group discussion. The purpose of the discussion was to inform the students about the direct aim of the study, which was to help the students manage their workload more effectively. The agenda for the next five weeks was also discussed. The students were told that each of them would have a one-on-one conference with their teacher at least once per week and that they would be assessing and selecting works to put in a work portfolio. The discussion was concluded once everyone in the group seemed to understand what to expect and what to look forward to in the upcoming project.

For the second through the fourth week of the study, observations of engagement occurred during work time. The teacher also conducted the one-on-one work conferences

with each student during the second through fourth week. The observations of students during their independent work time took place three times per week at approximately 10:00 each morning. Since this was a Montessori classroom, the work period typically lasted approximately three hours. The work period also consisted of guided lessons and independent work time. The lessons would range from twenty to forty minutes, and the students would then use the remainder of their work time to complete their independent assignments. These observations gave the teacher a chance to see the type of work or activities the students were drawn towards during the students' independent work time, specifically during times when an adult did not explicitly guide the students. The observation form used during the study had both quantitative and qualitative components. The quantitative component was a chart used to tally up the types of activities the students were engaged in during their independent work time. The qualitative component included taking notes about any noticeable patterns or factors that might have an effect on the students' engagement in their work (Appendix C).

Conferences were also conducted from the second to fourth week of this study. During the conference, the teacher read five questions to the student, and their responses were recorded on a form (Appendix D). The questions that guided the conference began with how the student felt about their work – i.e. the works they were proud of and the works they have found difficult to complete. The student was also asked to set a goal to meet by the following week. The goal was typically focused on completing a challenging work. If the student needed more guidance with completing a challenging work, then the student was encouraged to break the assignment up into parts – i.e. do one multiplication problem per day, or write five more sentences in your creative story by next week. The

goal would then be revisited at the next conference one week later, which gave the student and teacher time to reflect on the outcome. Finally, the last request on the conference form asked the student to, "Tell [the teacher] something that you would like to learn more about" (Appendix D). This final component of the conference (a) encouraged the students to find works that intrinsically motivated them; (b) made sure that the focus of the conference was not solely on the student's challenges, but on their interests as well; (c) ended the conference on a high note with the bond between teacher and student feeling strengthened. As the weeks progressed, it became apparent that the questions needed to be modified to fit the context. For instance, once a student had already completed one conference with the teacher, every conference from there on out could just focus on how the student felt about their work from the last week. This helped narrow down the focus of the meeting. Furthermore, checking on the outcome of the student's goals became a fundamental element of the conferences.

On the fifth week, observational data and record keeping on work completion continued along with two additional interventions. The first intervention was to have another guided discussion with all ten third-graders. Gathering all of the third-graders together gave the teacher a chance to share common themes and observations made over the course of the study. As stated in the introduction, motivation and structure are both necessary for high work engagement, so both motivation and structure needed to resonate with the two direct aims of this discussion. Therefore, the two objectives were:

1. To share common emotions about work and to help the students feel validated about those emotions. (Motivation)

2. To come up with practical work-time strategies that the students could use to meet their goals. (Structure)

By the end of the discussion, the students appeared to feel more validated about their shared feelings, and they also all left the conversation with a practical work-time strategy to help them stay on task. The students' strategies varied greatly. Some students decided to use work plans during work time. Some students chose to break a big work into smaller chunks. Some had a goal of just asking for some specific support on a certain assignment. Some even had a goal of just finding an interest project to get excited about studying. With all of that being said, it was gratifying to see the variety in their goals and that many of the students felt that their goals, no matter how demanding or simple, could be attained. From that meeting on, we checked on how the students were progressing on their goals during their individual work conference.

The second intervention involved students assembling their work portfolios, which also took place in the fifth week of the study. The students chose two works from a selection of baseline works gathered before the study began, and the students used a rubric to guide the assessment (Appendix E). The portfolio reflection form had a rubric that allowed the student to determine the quality and punctuality of their work. The form also had space for the student to reflect on how they felt about the work. Before the student began assessing their works, the teacher took the time to explain the sections of the rubric. The sections of the rubric asked the student to evaluate the correctness, the neatness, the punctuality, and the punctuation (if it was a language work). An appropriate level of mastery was selected for each section. The mastery ranged from novice to apprentice, to expert. If the students chose "novice" as the level of mastery,

then that meant that the students were still in the developing stages of mastery and needed a lot of support to complete the work. If the students chose "apprentice" as the level of mastery, then that meant that the students were in the practicing stages and only needed a little support to complete the work. Finally, if the students chose "expert" as the level of mastery, then that meant students thoroughly understood the concepts of the work and they were able to complete the work independently.

The last sections of the portfolio reflection form addressed the students' punctuality and the students' genuine thoughts about that particular work. Regarding punctuality, the students merely recorded whether the work was turned in on time, late, or if the work was incomplete. The final component of the form prompted the student to write about whether or not they were proud of that work and why. During the assessment and reflection of this baseline work, the students also were encouraged to reflect and compare their baseline work to the quality of the work they were doing currently. This initial reflection helped transition the students into the final phase of the study.

During the sixth and final week of the study, observations of work engagement continued to take place. The teacher also continued to record work completion data. During the final meeting with each student, the Work Conference Form was used once again, but the student was also asked to put one current project that they were proud of into their portfolio. The discussion revolved around why the student was proud of this particular work. The student was also prompted to reflect on how their work had progressed over the course of the study or even over the course of the year. Also, the student would be asked about their work time strategy and whether or not the strategy

was a legitimate tool to help them stay on task. The students would be encouraged to keep using the work time strategy or modify it to more adequately meet their needs.

Analysis of Data

Observational Data

Three times per week I observed the students using the Work Engagement Observation Form (Appendix C) for approximately ten minutes at around 10:00, give or take thirty minutes. I tallied up which activities and assignments the ten third-grade students were engaged in during the ten-minute observation. Figures 1-3 demonstrate how work engagement shifted from the beginning, middle, and to end of the study. The green portions of the pie chart represent appropriate activities to be engaged in during work time. The pink portions of the pie chart represent activities outside of work that the students were engaged in during work time.

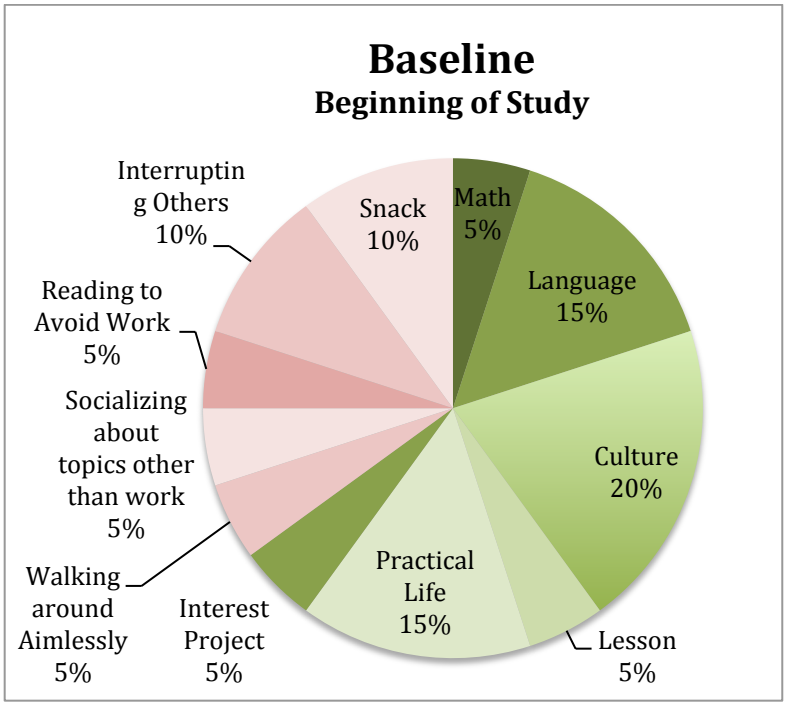


Figure 1. Activities the third graders were engaged in during independent work at the beginning of the study.

During the first week of the study, on average, 65% of students engaged in appropriate works during their independent work time (see Figure 1). Student engagement was noted by adding up the green portions of the pie chart. The students engaged in five different appropriate work choices: math, language, culture, practical life activities, or lessons. In contrast, looking at the pink portion of the pie chart, the remaining 35% of the students engaged in activities outside of their work during the first week of observation. There were five categories of activities outside the students' work observed on average during the first week of the study. The activities included eating snack, interrupting others that are working, reading to avoid work, socializing about topics other than work, and walking around aimlessly.

Week four marked the middle of the study. Three weeks after the beginning of the study, a dramatic shift had taken place.

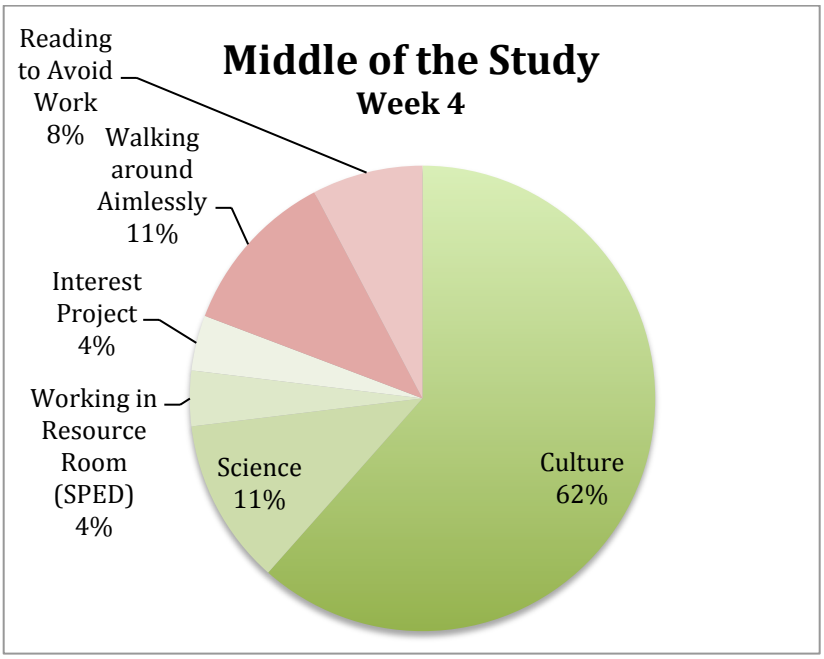
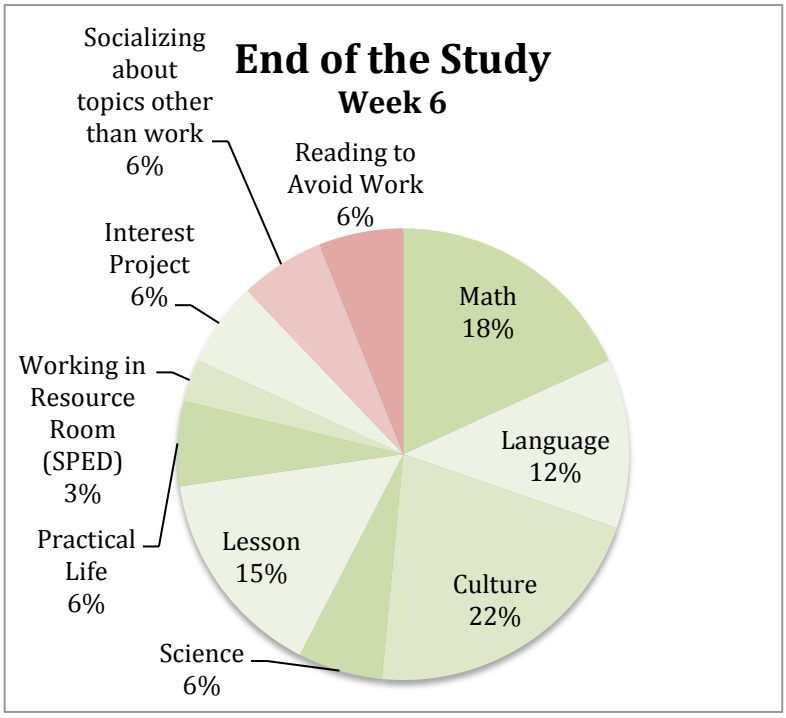


Figure 2. Activities students were engaged in independent work time during the middle of the study.

Looking at Figure 2, appropriate work engagement (the green portion of the pie chart) had increased by 16% since week one of the study. Furthermore, there were only two types of off-task behaviors that were observed on average during the fourth week (walking around aimlessly and reading to avoid work), versus the five off-task behaviors that were observed during the first week. Over 60% of the students were engaged in cultural works, i.e. history and geography works, which coincided with a large cultural project that was introduced the week before. The cultural assignment asked the students to conduct a "Study of our Nation." The students were asked to create a series of physical maps and political maps that highlighted different features of our nation.



N=10

Figure 3. Activities students were engaged in during independent work time at the end of the study.

The material allowed many of the students to work on it at the same time and over the remainder of the study approximately 50%-80% of the students were observed working on the "Study of a Nation" project during observations. This observation

suggested that the students tended to gravitate towards larger projects, especially when all the necessary resources were readily available.

Week six marked the end of the study. Five weeks after the beginning of the study, data collected during observations had shown that off-task behavior was demonstrated on average by 12% of the students, versus 35% of the students at the beginning of the study (see Figure 3). Three weeks had passed since the "Study of our Nation" project was introduced, so student engagement in cultural works had decreased, and eight categories of appropriate work engagement were observed as opposed to the four categories of appropriate work engagement noted in week four (see Figure 2). Therefore, observations demonstrated in Figure 3 show an increase in the frequency of student engagement and also in the variety of appropriate work choices.

Work Completion Records

The mean, median, and mode of work completion records are shown in the figures below. The number of assignments that students completed per week is recorded in Figure 4 while the number of incomplete works is recorded in Figure 5. Completed projects included assignments that were on time or late. After week two, the median corresponds with the data collected for the mode. From week one to week two, on average, work completion increased from less than two assignments per week to three assignments per week. From week two to week five, however, work completion dropped from three works per week to one work per week.

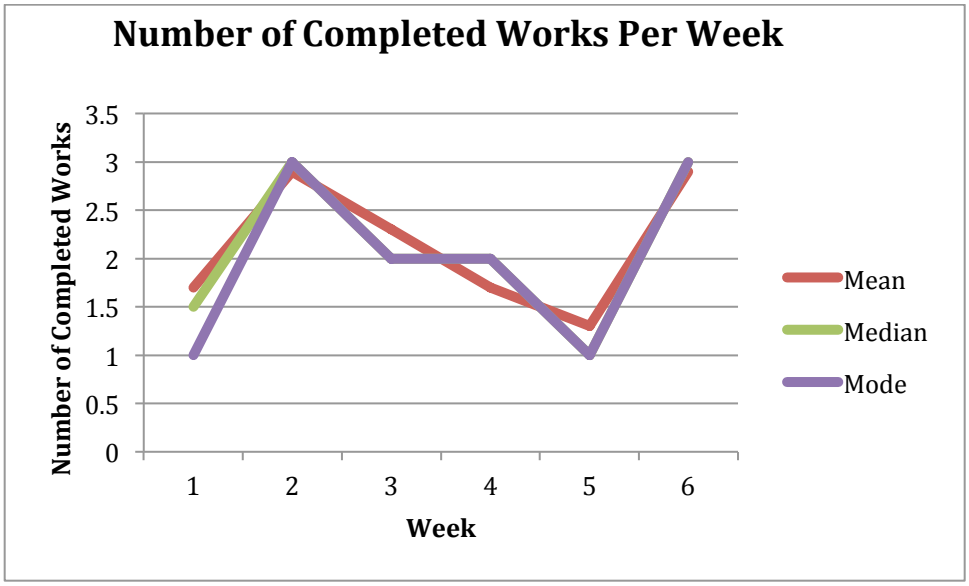


Figure 4. Number of works the students completed per week.

One explanation of this downward trend was outside of student control. The study lasted six weeks, but only two of the weeks were actually full, five-day weeks. There were a number of holidays, workdays, field trips, and a faculty retreat. Week two, four, and six were four-day weeks. Week five was only a two-day week, which is why the students only completed one assignment on average that week. It was reassuring to see that by week six, the number of completed assignments was increasing once again, but on average, the third grade students could not seem to complete more than three assignments per week. In this classroom, there was often something due every day, which means that each week four to five assignments were due. It also became apparent, as more assignments continued to be due it was less likely that the students would return to any incomplete work. In Figure 5, the increase of incomplete assignments increased and plateaued from week two to week five.

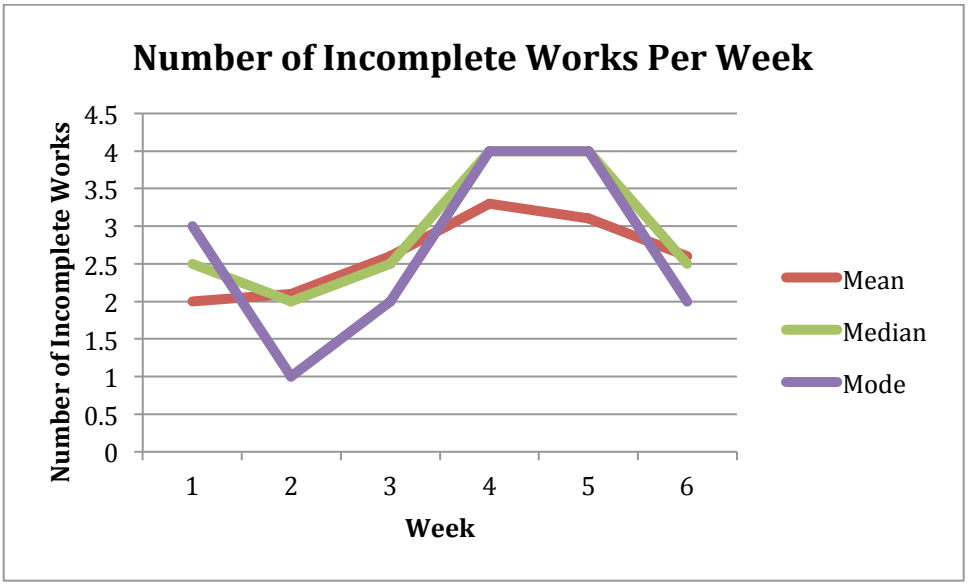


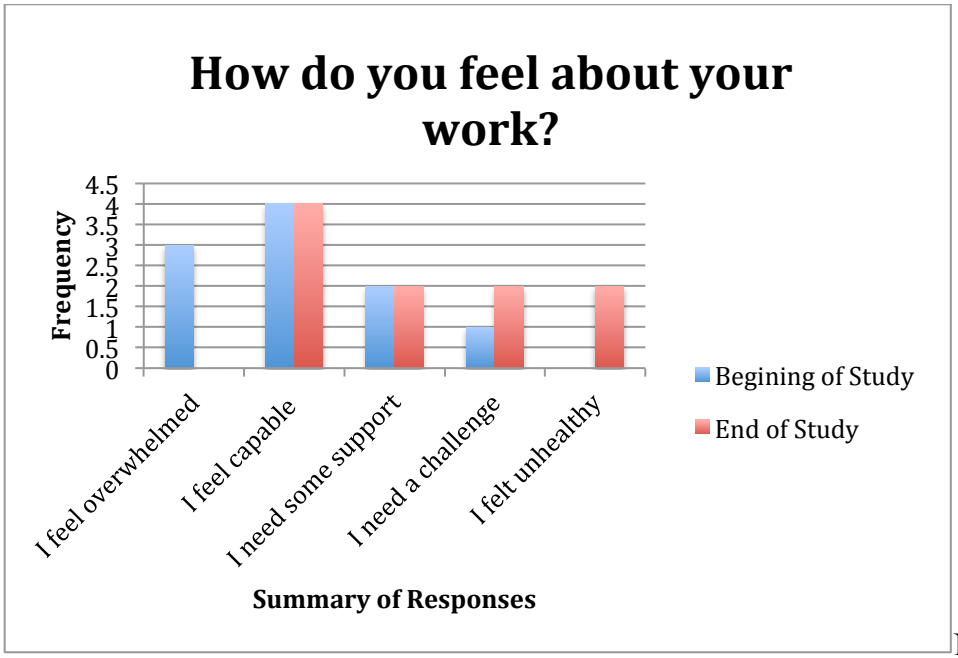
Figure 5. The number of works that students did not complete per week.

Students put more priority on the assignments that were due rather than on incomplete assignments. As stated in the analysis of observational data, students were highly engaged in a cultural project. The students were motivated to learn more about that one project and they had all of the necessary materials and resources to complete the work independently. The works that were incomplete were typically math or science works that the students could not readily do without support. It was observed that if resources or support were not readily available to complete a late work, then the work was avoided during independent work time. Students had a chance to explain why they were having difficulties in a student-led work conference.

Work Conference Questionnaire

Over the course of the study, each student had a private, weekly conference about his or her work with me, using the Work Conference Questionnaire (Appendix D). Once all of the answers from the Work Conference Questionnaire were collected and recorded, certain themes arose in the students' responses toward their work.

1. How do you feel about your work and why?



N=10

Figure 6. Summary of student responses to how they felt about their work at the beginning and at the end of the study.

After analyzing and summarizing the students' responses, five categories emerged:

1. I feel overwhelmed
2. I feel capable
3. I need some support
4. I need a challenge
5. I felt unhealthy

Figure 6 shows a summary of the students' responses to question one, or how the students felt at the beginning and at the end of the study. Four of the ten students stated that they felt capable enough to complete their work. They felt that their needs were being met. The remaining six students' needs were not being met, because the students felt overwhelmed, that they needed some support, or that they needed more of a challenge.

Figure 6 also demonstrates the shift of the students' responses to the same question of how they felt about their work at the end of the study and a significant shift occurred. Three students felt overwhelmed by the workload at the beginning of the study, but no students responded that they felt overwhelmed by workload by the end of the study. Four students responded that they felt capable. Four students needed some support or needed more of a challenge, and two students felt unhealthy that week (a wave of illness was going around the classroom at the time). It should still be noted that the students that felt unhealthy that week still responded that they felt "good" or "O.K." about their work.

2. What is a work you are proud of?

The students generated a variety of responses to this question. Figure 7 demonstrates that at the beginning of the study, students chose projects across four subjects that they were proud of and relatively evenly. By the end of the study, the students only chose projects across two subjects, with a significant majority of the students (86%) that chose a cultural work they were proud of. The high cultural work percentage also coincided with the "Study of our Nation" project, which, as mentioned earlier in the analysis, was a cultural assignment. Since the work was new and engaging to more than 80% of the students, it is not surprising to see that the majority of the students chose cultural assignments that they were proud of. At the time, the math assignments were more about practicing skills with the operations. The students were engaged in the science lessons, but the students were not entirely sure how to complete their science follow-up work on their own. The language work was a dictionary project, that was attractive to many of them, but the idea of big work and a large culminating

project such as the "Study of our Nation" was a work that seemed to inspire the students the most.

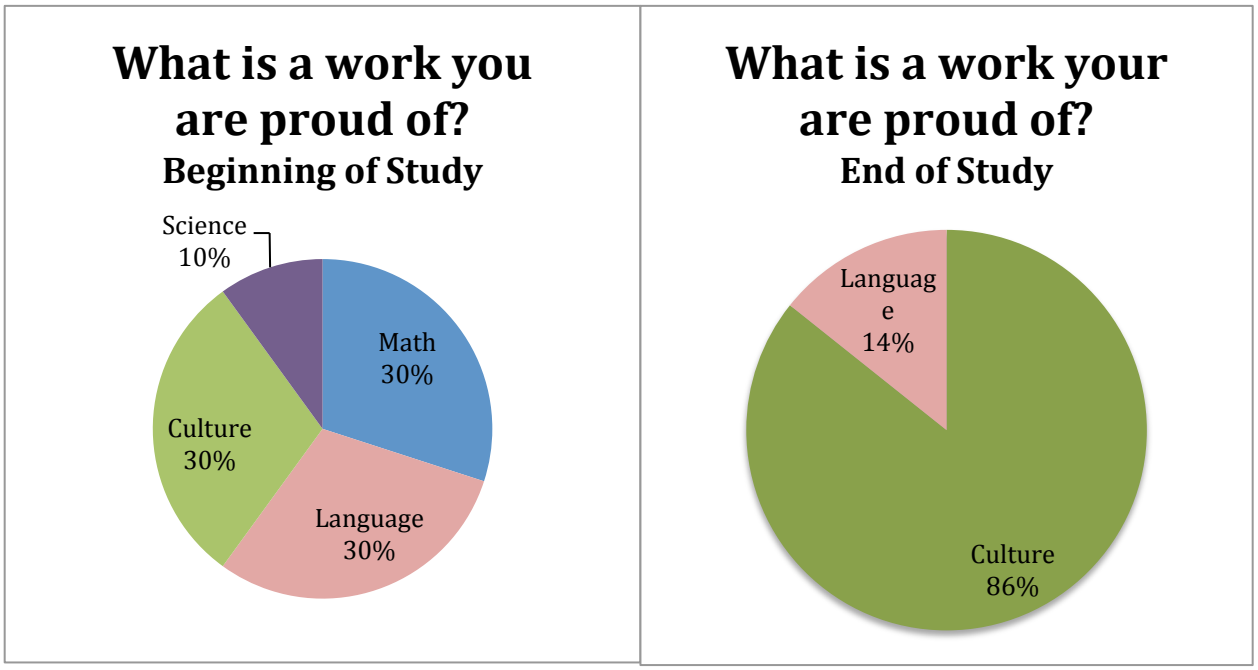


Figure 7. Types of works students were proud of at the beginning and at the end of the study. N=10

3. Name a work that has been difficult to finish.

At the beginning of the study, students chose projects that were difficult to complete across four subjects (see Figure 8), with 40% choosing science assignments as being difficult to complete. By the end of the study, science works continued to trend as the most difficult assignments to complete. At the same time, 28% of students stated that the work was not difficult to finish or that it was not difficult to complete, but that it was just hard to get everything done. With that being said, Figure 8 also demonstrates the fact that almost 30% of the students were beginning to feel that the work was not too difficult to finish and that the students were feeling less overwhelmed by the workload.

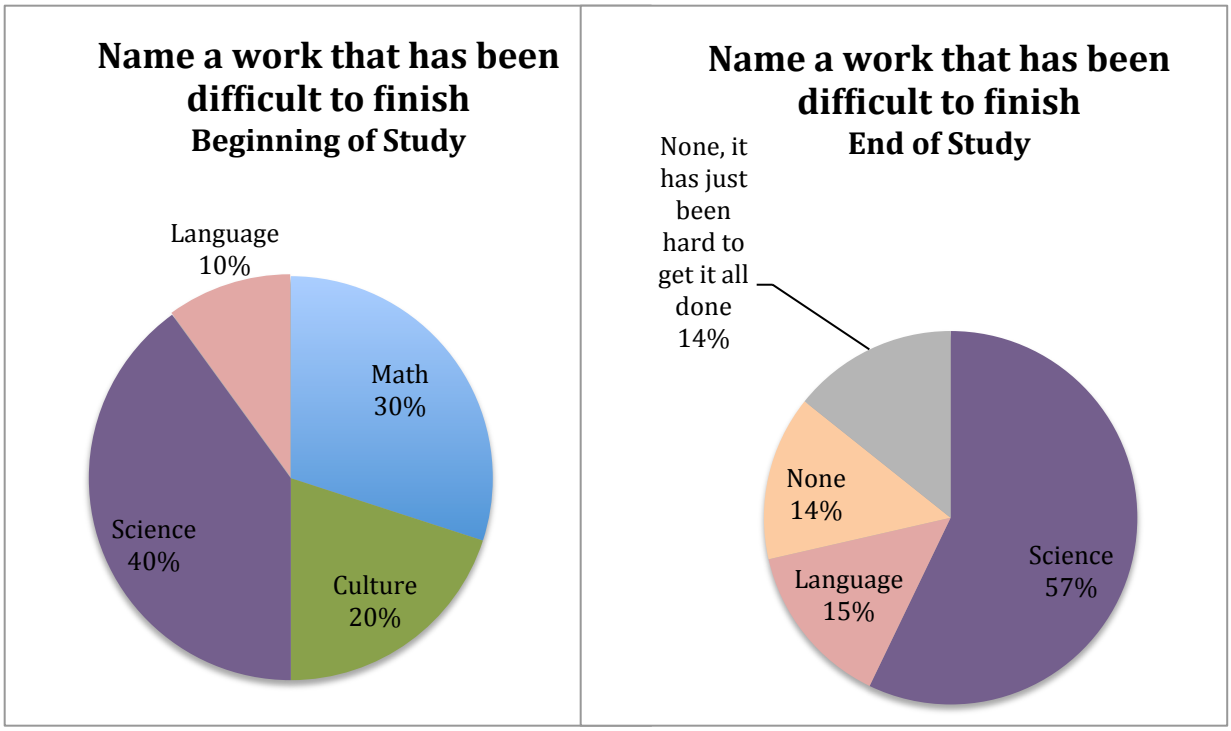


Figure 8. Types of works the students identified as difficult to finish at the beginning and end of the study. N=10

4. What is one goal you can achieve by the time we meet again?

This question helped the students identify goals or a work time strategy in order to be more efficient during their independent work time (See Figure 9). Below is a summary of their responses:

- To break up a larger work into smaller parts (i.e. do two math problems per day, or write one page of my creative story per day)
- To completely finish a project
- To ask for support
- To try a work plan (i.e. a daily checklist or work journal)
- To discover an interest project if the student does not feel challenged enough

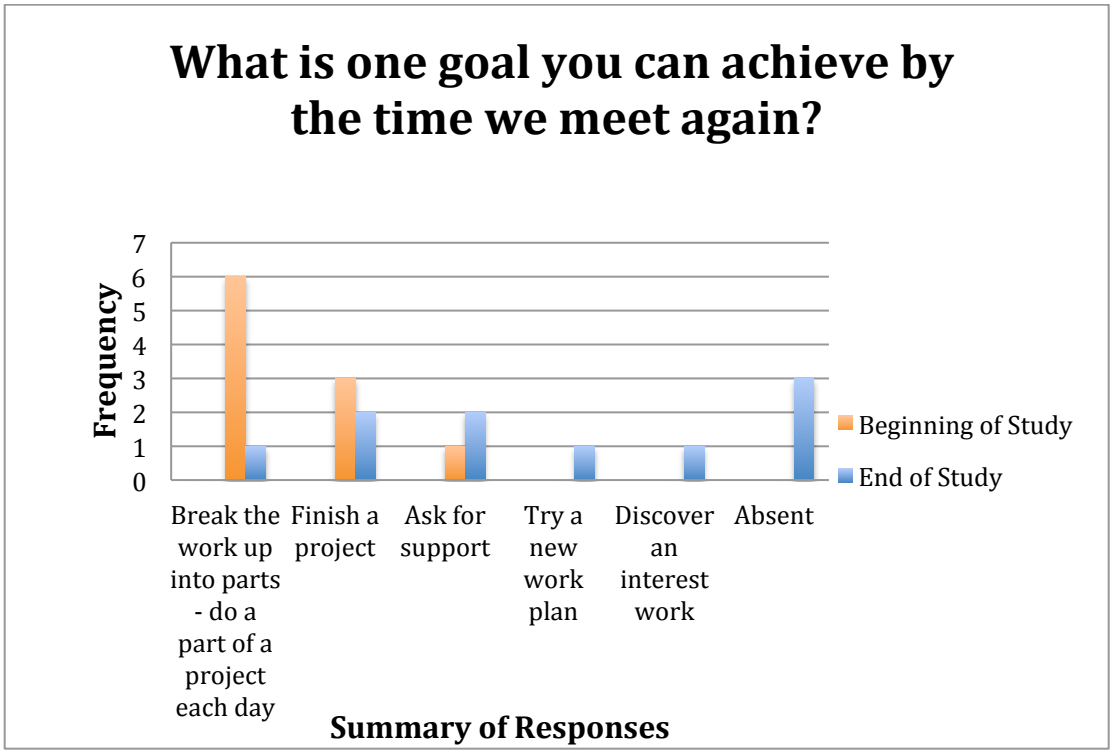


Figure 9. Goals students set in order to accomplish their work at the beginning and the end of the study. N=10

At the beginning of the study, only three themes or categories were reflected in the students' responses: to break a big work up into smaller parts, to finish a project, and to ask for support. By the end of the study, responses were more varied. In addition to the responses from the first week, students also tried using a new work plan or tried to discover a new interest work as a new challenge. Unfortunately, three students were absent at the time data was gathered, so it would be interesting to see how the three might have fit in the spectrum of responses. As time progressed, the group realized that they had set goals, but remembering to attend to those goals was too easily forgotten amidst all of their other obligations. In a whole-group discussion, the third graders decided to post their weekly goals on a white board, so that they could see their goals and check them off once they were completed. By the end of the study, 50% of the students were meeting

their goals. The five of the ten students were students that were already on top of their work, but it also included students that originally had four incomplete assignments and had one or two incomplete assignments by the end of the study. Posting the goals for all of the students to see were beneficial to this 50%, but more intervention seemed necessary to meet the needs of the remaining 50%.

Portfolio Self-Assessment and Reflection

Self-assessment of work samples.

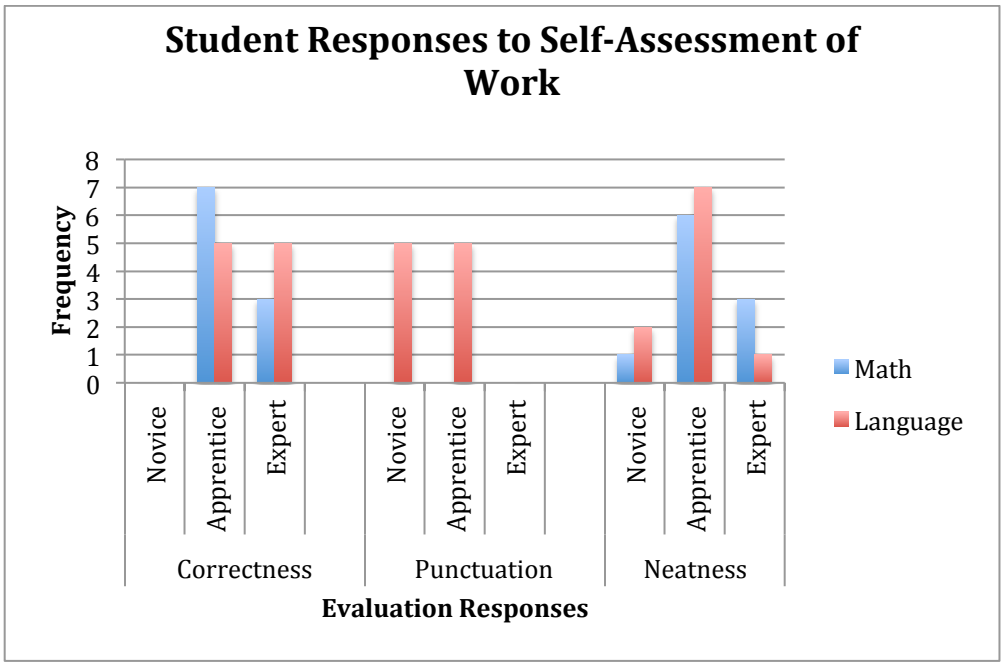


Figure 10. Self-Assessment of correctness, punctuation, and neatness in math and language work.

The final data collection tool used in this study required a selection of math and language assignments that the students completed before the study as well as a reflection form (Appendix E). Language and math work samples were more readily available to evaluate since science and cultural works were more project-based. The form was used to help the students self-assess the correctness, neatness, and the proper use of punctuation in their work (see Figure 10).

As the students assessed these categories in their work, they had to choose amongst three levels of mastery: novice, apprentice, and expert. A "Novice" learner was categorized as someone that was a beginner and needs a lot of support with the work. If the student chose "Apprentice," that meant that they felt like they still need practice to master the concept, but only need a little support. "Expert" was chosen if the student felt that they completely understood the concept and needed no support. In math, none of the students identified themselves as novice when it came to the correctness of their work. Seven of the ten students said their correctness was apprentice and three students identified themselves as experts in the selected math assignments. The students' answers were more varied in the neatness category, one student identified his or her neatness as novice, six identified their neatness as apprentice, and three students identified their neatness as expert. In language, the evaluation was very similar to the math responses in correctness and neatness. In punctuation, however, half of the students felt as if their punctuation was novice and half felt as if their punctuation was apprentice. In future lessons, language instruction will need to address conventions and punctuation in order to remedy the students' feelings towards their competency in punctuation.

As the students assessed their baseline projects, they were encouraged to reflect on how their work has progressed since the beginning of the study. In discussion, the majority of the students, approximately 80%, felt as if their neatness has improved over the course of the study, but their feelings toward correctness and punctuation remained the same.

Punctuality.

In this part of the portfolio reflection, the students identified whether the work was turned in on time, late, or if the work was never completed (see Figure 11). An inverse relationship between the punctuality of language and math work was revealed. Only 30% of the students turned math work in on time whereas 70% of the students turned in their language work on time. One reason behind this trend could be a reflection of the students' pattern of gravitating towards larger projects and forgetting the smaller assignments. Many of the language works were engrained in larger research studies in culture, where as the math assignments tended to focus on practicing a concept learned at the lesson, i.e. complete five long multiplication problems. Therefore, it was possible that a lack of variety in the math assignments might have contributed to high amount of late math work. It should also be noted that the math and language works selected for their portfolios were all completed works.

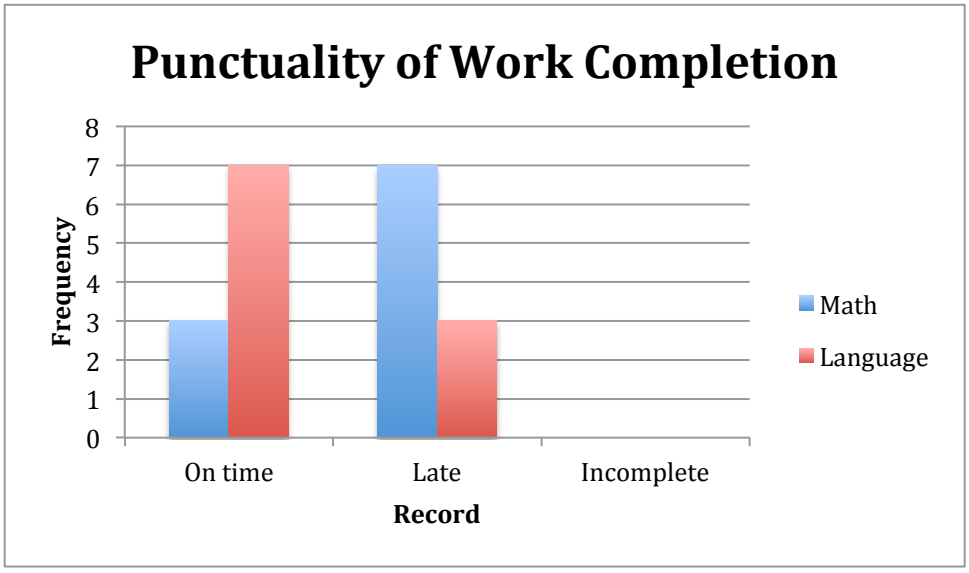


Figure 11. Punctuality of work completion in math and language assignments.

One of the purposes of the portfolio was to help inspire and encourage the students to feel proud of their work, so it was intentional that no incomplete works were

selected. In reality, the actual punctuality would reflect more incomplete works, primarily in math.

Reflection responses.

Reflecting on whether or not the students were proud of the selected work was the final step. In math, five students felt capable enough to complete the assignment and the remaining five felt as if they were appropriately challenged (see Figure 12). In language, 60% students felt capable and appropriately challenged. In addition, 20% of the students felt intrinsically motivated and another 20% felt connected to the real world in their language work.

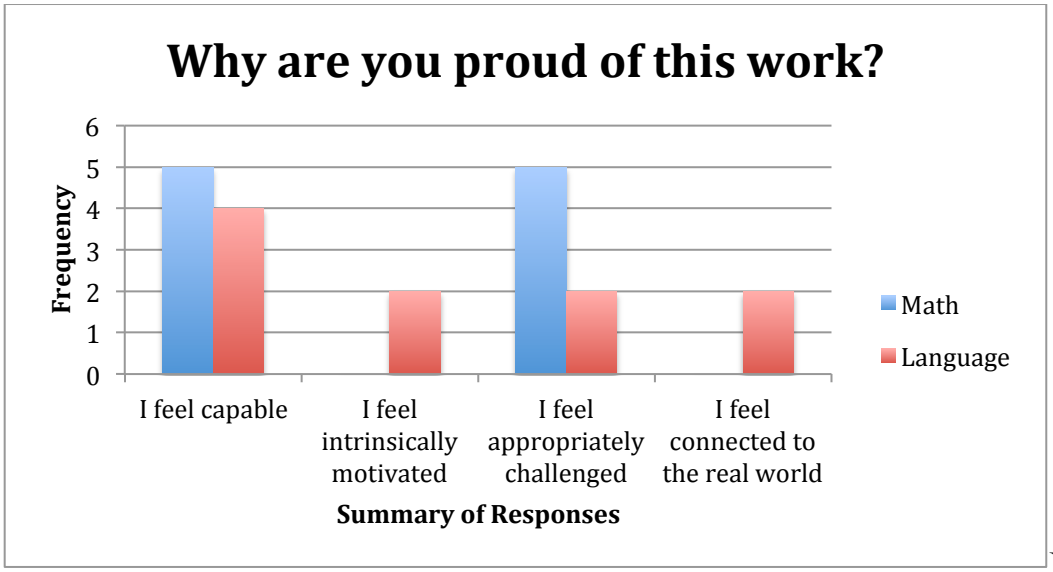


Figure 12. Student reflection responses to why they are proud of selected math and language work.

Helping the students feel intrinsically motivated and connected to the real world in their math work seems to be a key to increase engagement in math assignments, which brings us to conclusions made from this study.

Action Plan

With more than 80% of the students having felt proud and engaged in cultural work, how could we bring that same attitude towards their math, language, and science work? The following sections outline the action plan moving forward.

Continue to Assemble Portfolios with More Freedom of Choice

Since the students already felt such a connection towards their cultural work, it seems necessary to allow them to add samples of their cultural work and science work to their portfolio. A photo could be taken of the exhibit or experiment that the student conducted and could then be added to the portfolio alongside math and language samples. Moving forward, the students will add two projects to their portfolio every two weeks, and their selection will need to include one math assignment and one assignment that incorporates written language. The assignment that incorporates written language could be from a language lesson, but it could also be from a culture or science experiment as long as the student had to demonstrate that they needed to write and use proper punctuation.

Explicit Lessons in Punctuation

Based on the self-assessment of punctuation in the students' portfolio reflections, all of them felt that their punctuation was either apprentice or novice. To remedy this feeling towards their writing, two things need to occur. First of all, there will need to be more explicit lessons that review language conventions, i.e. capitalization, periods, commas, and quotations. Secondly, assignments that involve writing should have expectations of proper punctuation integrated into the lesson's assignment. That means in order for the assignment to be accepted as complete, the writing must use correct punctuation. With both explicit punctuation lessons and the expectation that the students

use proper conventions in their written work, hopefully more students will feel competent about their writing skills.

Help the Students Develop Work Time Strategies

This study has revealed that the students need help identifying more options for work time strategies. The students have shown that they want to complete their work and stay on task, but "there is so much" and they sometimes "forget about what's due." As stated previously, only 50% of the students were meeting their goals each week. In order to fully meet the needs of all of the students during work time, actively searching for more practical work-time strategies needs to continue. One student found that regularly using a work time journal to stay on top of his work was the best option. Some have agreed to use a work plan that is just a sheet with three spaces to help the students identify three works that they intend to get to during work time – typically a morning math work, a late work, and a due work. Unfortunately, we have noticed that if the students don't get to all of their works on their work plan during work time, they become discouraged and are less likely to use the work plan.

There must be a way to help the students believe that there is enough time to get to their lesson and all of their works on their work plan completed. A fascinating way to help demonstrate this might be to have the teacher model being a student. The teacher can demonstrate how they use their work time to stay on task, how to take an appropriate break, how to attend a lesson, and all the while continue to maintain healthy relationships with the other classmates. Giving the students the chance to observe could be very meaningful to some of them. The students have also gotten a lot out of observing the

older students during their work time to gather even more ideas about work time strategies that they could use.

For the few that truly can't seem to get to more than one work during the three-hour work period, they could have some sort of special, soundless timer that signifies that it is time to switch gears to another work. That way more works are getting attention, even though they may not all be completed in that one work period. With all of this being said, the students would need to be willing to accept any of these strategies in order for the strategies to be sustainable, so students should be actively involved in the ongoing discussions and brainstorming about potential work time interventions.

Differentiation in Follow-Up Work Choices

The students were attracted to large projects with a clear purpose or a way for them to connect to the real world. Ways to help the students connect their math work to culture or science could be a key approach. Still, in order to make sure that the students do not feel overwhelmed by too many large projects, the teachers could alternate larger assignments and smaller assignments across the subjects. For example, one week there may be a large math project that could take one week to complete. In that same week, the cultural assignments could take a shorter amount of time and could possibly even be completed at the lesson. That way, students could have the opportunity to attend to all of the works from each subject each week and each subject would have the chance to have the students complete a larger project.

Break Up the Larger Projects into Parts

Another impact that the teachers could have on work completion could be to restructure due dates and deadlines. On larger projects in particular, instead of giving the

students a long period of time to complete the entire assignment, specifically outline what should be done with multiple, shorter due dates. The students could also be coached on how to independently outline multiple due dates for a large assignment as well. This allows the students to designate their time to more than just one large project. Breaking the big assignments into smaller tasks with shortened due dates will hopefully also help the students feel less overwhelmed. Having multiple due dates also allows time for feedback and support along the way. As stated in the data analysis portion of this study, the students were attracted to works where all of the necessary resources were easily accessible. Breaking the work up into sections, would help the students know what to focus on and, therefore, more easily access the resources they would need to complete the work.

Impact on Student Learning

Keeping in mind the findings from this study along with the action plan moving forward will hopefully help the students feel more competent in their abilities to do independent work. Also, ongoing discussions and genuine feedback between the students and their teachers will continue to nurture a strong and trusting relationship. Once the students leave lower elementary and move on to upper elementary, they will leave having multiple work time strategies and tools at their disposal. These strategies and skills will be invaluable as their course work increases and becomes more advanced.

Potential Future Action Research Investigation

In the future, I would like to make sure that all of the students in my class have the chance to have regular work conferences and to assemble portfolios. If the students get an early start on reflecting on their work and developing work time strategies, then I

can only imagine how much this critical thinking will benefit the students by the time they reach third grade. Figuring out the logistics will be a little difficult at first, but I can see the tools I used in this study becoming just another part of our classroom culture, especially the conferencing and goal setting.

I would also like to put more time and effort into enriching the assignments the students will do for math and language. Many of the lessons in math just need to give students exposure to the content and time to practice, but there could also be larger projects that could incorporate math in their cultural work. Either way, I can say with confidence that this research has revealed new and exciting paths, and I intend to continue to utilize the tools that I have crafted for this study. Moving forward, I hope that this research will prompt teachers to dedicate more time to helping students foster skills in task management. As academic and social expectations become more demanding as a student progresses through their time in school, strong task management skills will assist the student during their school career.

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Appendix A

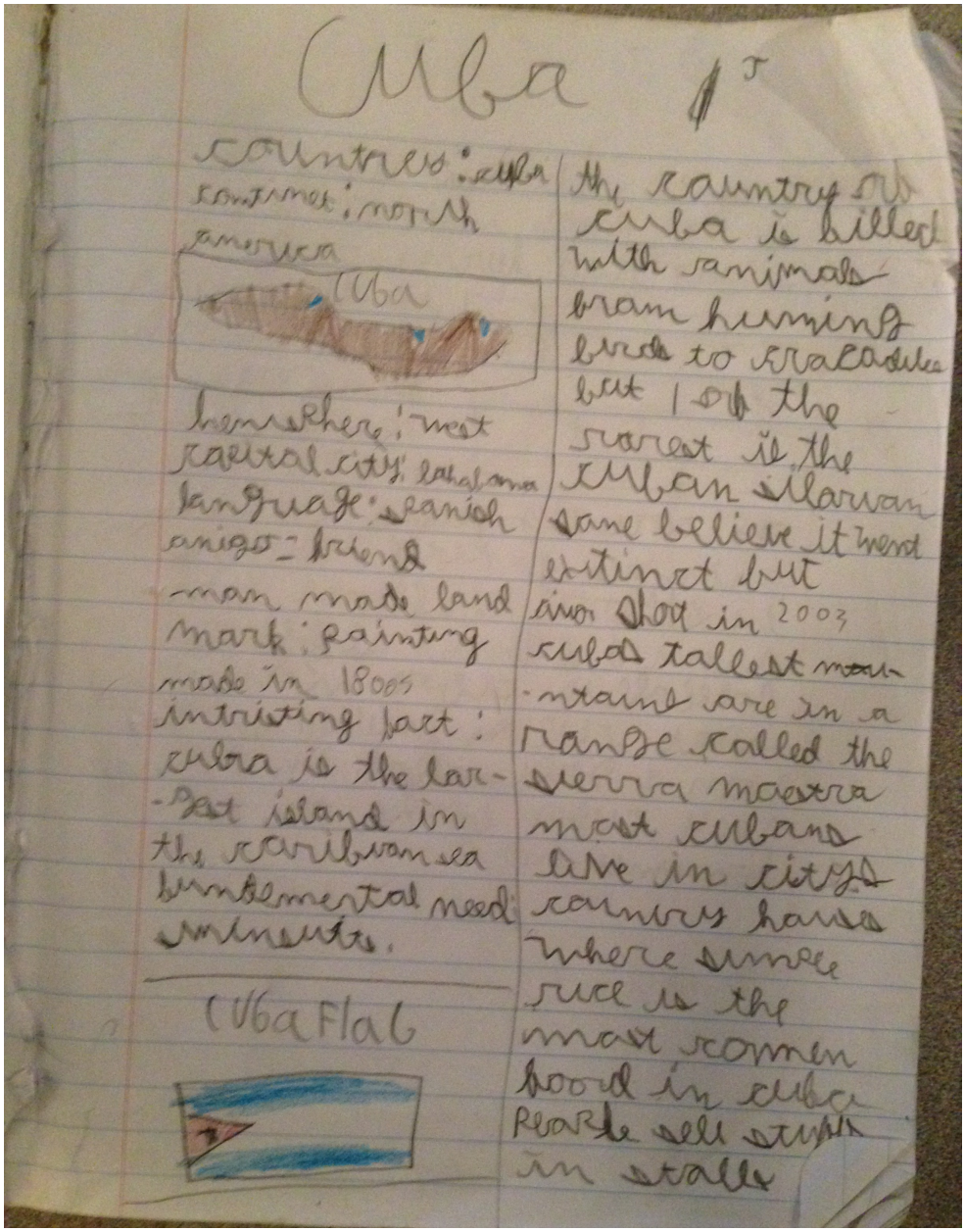
Work Completion Records
Data was collected for six weeks

	Baseline					Week 1				
Third Graders	Complete	Late	Incomplete	Refusal	Absent	Complete	Late	Incomplete	Refusal	Absent

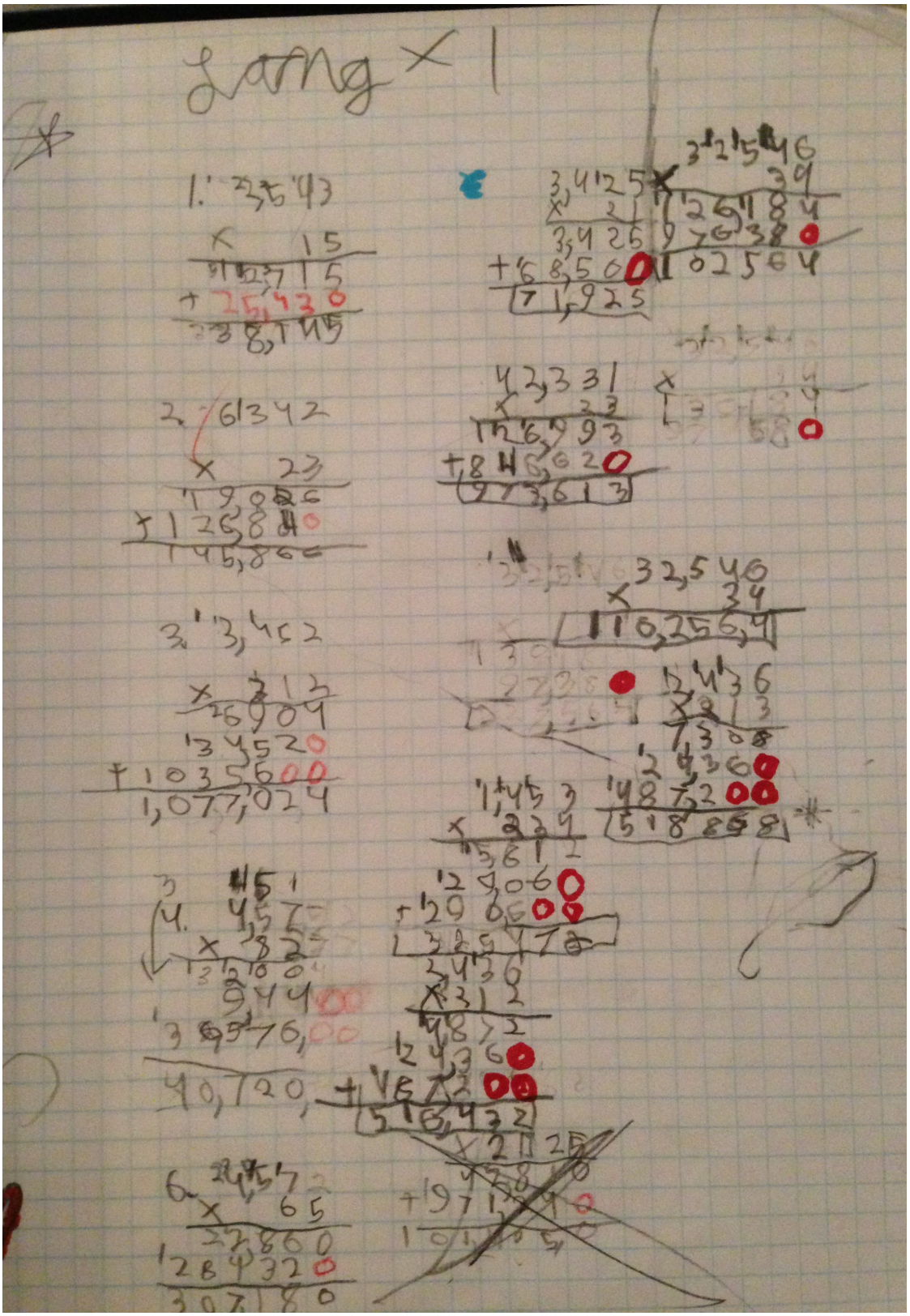
Appendix B

Student Work Samples - Baseline

Language Work Sample



Math Work Sample



Appendix C

Work Engagement Observation Form

Week:_____
Time:_____

Engaged in work	Not engaged in work
Math:	Walking around aimlessly:
Language:	Socializing about topics other than work:
Culture:	Reading to avoid work:
Science:	Drawing to avoid work:
Lesson _____	Using work inappropriately:
Practical life:	Interrupting others:
Interest project:	Snack:
Reading to aid work:	
Drawing to aid work:	
Pull out (SPED)	

Notes:

- Working with partners? With whom?
- Working independently?
- Asking a teacher for help?
- Have the students just had a lesson?

Appendix D

Work Conference Questionnaire

Name:
Date:

1. **How do you feel about your work? (After week 1 ask, "How did you feel about you work in this past week?)**

Why?

2. **Describe one work you are proud of.**

Why?

3. **Name one work that has been difficult to finish.**

Where are you getting stuck?

During the lesson Starting the work Finishing the work and making corrections

Why has it been difficult?

4. **One goal that you can achieve by the time we meet again. (After week 1, ask, " Have you met your previous goal? How were you able to accomplish this goal? How come you weren't able to meet this goal?")**

5. **Tell me about something you would like to learn more about.**

Appendix E

Portfolio Reflection Form

Name of student:			
Name of the work:			
Check the following			
	Novice	Apprentice	Expert
Correctness	☐	☐	☐
Punctuation	☐	☐	☐
Neatness	☐	☐	☐
Punctual	On time ☐	Late ☐	Incomplete ☐
Are you proud of this work?			
Why are you proud of it?			